

0590  
1019

OIPE

CRF Errors Corrected by the STIC Systems Branch

Serial Number: 09/965,594

CRF Processing Date: 10/25/2001  
Edited by: h  
Verified by: h (STIC stat)

ENTERED

#0708

- ☐ Changed a file from non-ASCII to ASCII
- ☐ Changed the margins in cases where the sequence text was "wrapped" down to the next line.
- ☐ Edited a format error in the Current Application Data section, specifically: \_\_\_\_\_
- ☐ Edited the Current Application Data section with the actual current number. The number inputted by the applicant was ☐ the prior application data; or ☐ other \_\_\_\_\_
- ☐ Added the mandatory heading and subheadings for "Current Application Data".
- ☐ Edited the "Number of Sequences" field. The applicant spelled out a number instead of using an integer.
- ☐ Changed the spelling of a mandatory field (the headings or subheadings), specifically: \_\_\_\_\_
- ☐ Corrected the SEQ ID NO when obviously incorrect. The sequence numbers that were edited were: \_\_\_\_\_
- ☐ Inserted or corrected a nucleic number at the end of a nucleic line. SEQ ID NO's edited: \_\_\_\_\_
- ☐ Corrected subheading placement. All responses must be on the same line as each subheading. If the applicant placed a response below the subheading, this was moved to its appropriate place.
- ☐ Inserted colons after headings/subheadings. Headings edited included: \_\_\_\_\_
- ☐ Deleted extra, invalid, headings used by an applicant, specifically: \_\_\_\_\_
- ☒ Deleted: ☒ non-ASCII "garbage" at the beginning/end of files; ☐ secretary initials/filename at end of file;  
☐ page numbers throughout text; ☐ other invalid text, such as \_\_\_\_\_
- ☐ Inserted mandatory headings, specifically: \_\_\_\_\_
- ☐ Corrected an obvious error in the response, specifically: \_\_\_\_\_
- ☐ Edited identifiers where upper case is used but lower case is required, or vice versa.
- ☐ Corrected an error in the Number of Sequences field, specifically: \_\_\_\_\_
- ☐ A "Hard Page Break" code was inserted by the applicant. All occurrences had to be deleted.
- ☐ Deleted *ending* stop codon in amino acid sequences and adjusted the "(A)Length:" field accordingly (error due to a PatentIn bug). Sequences corrected: \_\_\_\_\_
- ☐ Other: \_\_\_\_\_

Examiner: The above corrections must be communicated to the applicant in the first Office Action. DO NOT send a copy of this form.

#2

## RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/965,594

DATE: 10/25/2001

TIME: 08:46:14

Input Set : A:\PTO.AMC.txt

Output Set: N:\CRF3\10252001\I965594.raw

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5 <110> APPLICANT: Wittekind, Michael
7   Weinheimer, Steven
9   Zhang, Yaqun
11  Goldfarb, Valentina
15 <120> TITLE OF INVENTION: Modified Forms of Hepatitis C NS3 Protease for
17   Facilitating Inhibitor Screening and Structural Studies
19   of Protease:Inhibitor Complexes
23 <130> FILE REFERENCE: DB17Sequences
C--> 27 <140> CURRENT APPLICATION NUMBER: US/09/965,594
C--> 29 <141> CURRENT FILING DATE: 2001-09-27
33 <150> PRIOR APPLICATION NUMBER: 60/115,271
35 <151> PRIOR FILING DATE: 1999-01-08
39 <160> NUMBER OF SEQ ID NOS: 26
43 <170> SOFTWARE: PatentIn Ver. 2.0
47 <210> SEQ ID NO: 1
49 <211> LENGTH: 182
51 <212> TYPE: PRT
53 <213> ORGANISM: Hepatitis C virus
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61 1 5 10 15
65 Cys Ile Ile Thr Ser Leu Thr Gly Arg Asp Lys Asn Gln Val Glu Gly
67 20 25 30
71 Glu Val Gln Ile Val Ser Thr Ala Ala Gln Thr Phe Leu Ala Thr Cys
73 35 40 45
77 Ile Asn Gly Val Cys Trp Thr Val Tyr His Gly Ala Gly Thr Arg Thr
79 50 55 60
83 Ile Ala Ser Pro Lys Gly Pro Val Ile Gln Met Tyr Thr Asn Val Asp
85 65 70 75 80
89 Lys Asp Leu Val Gly Trp Pro Ala Pro Gln Gly Ser Arg Ser Leu Thr
91 85 90 95
95 Pro Cys Thr Cys Gly Ser Ser Asp Leu Tyr Leu Val Thr Arg His Ala
97 100 105 110
101 Asp Val Ile Pro Val Arg Arg Arg Gly Asp Ser Arg Gly Ser Leu Leu
103 115 120 125
107 Ser Pro Arg Pro Ile Ser Tyr Leu Lys Gly Ser Ser Gly Gly Pro Leu
109 130 135 140
113 Leu Cys Pro Ala Gly His Ala Val Gly Ile Phe Arg Ala Ala Val Cys
115 145 150 155 160
119 Thr Arg Gly Val Ala Lys Ala Val Asp Phe Ile Pro Val Glu Ser Leu
121 165 170 175
125 Glu Thr Thr Met Arg Ser
127 180
133 <210> SEQ ID NO: 2
135 <211> LENGTH: 549
137 <212> TYPE: DNA
139 <213> ORGANISM: Hepatitis C virus

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143 &lt;400&gt; SEQUENCE: 2

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145 atggctccga tcaccgctta cgctcagcag acccgtggtc tgctgggttg catcatcacc 60
147 tccctgaccg gtcgtgacaa aaaccagggt gaaggtgaag ttcagatcgt ttccaccgct 120
149 gctcagacct tcctggctac ctgcatcaac ggtgtttgct ggaccgttta ccacggtgct 180
151 ggtacccgta ccatcgcttc cccgaaaggt ccggttatcc agatgtacac caacggtgac 240
153 aaagacctgg ttggttgccc ggctccgcag ggttcccggt cctgacccc gtgcacctgc 300
155 ggttcctccg acctgtacct ggttaccggt cagctgacg ttatcccggg tcgtcgctcg 360
157 ggtgactccc gtggttccct gctgtccccg cgtccgatct cctacctgaa aggttcctcc 420
159 ggtggtccgc tgctgtgccc ggctggtcac gctgttggtg tcttccgtgc tgctgtttgc 480
161 acccgtgggt ttgctaaagc tgttgacttc atcccgggtg aatccctgga aaccaccatg 540
163 cgttcctga                                     549

```

167 &lt;210&gt; SEQ ID NO: 3

169 &lt;211&gt; LENGTH: 195

171 &lt;212&gt; TYPE: PRT

173 &lt;213&gt; ORGANISM: Hepatitis C virus

177 &lt;400&gt; SEQUENCE: 3

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179 Met Lys Lys Lys Gly Ser Val Val Ile Val Gly Arg Ile Val Leu Asn
181   1           5           10           15
185 Gly Ala Tyr Ala Gln Gln Thr Arg Gly Leu Leu Gly Cys Ile Ile Thr
187           20           25           30
191 Ser Leu Thr Gly Arg Asp Lys Asn Gln Val Glu Gly Glu Val Gln Ile
193           35           40           45
197 Val Ser Thr Ala Ala Gln Thr Phe Leu Ala Thr Cys Ile Asn Gly Val
199           50           55           60
203 Cys Trp Thr Val Tyr His Gly Ala Gly Thr Arg Thr Ile Ala Ser Pro
205   65           70           75           80
209 Lys Gly Pro Val Ile Gln Met Tyr Thr Asn Val Asp Lys Asp Leu Val
211           85           90           95
215 Gly Trp Pro Ala Pro Gln Gly Ser Arg Ser Leu Thr Pro Cys Thr Cys
217           100          105          110
221 Gly Ser Ser Asp Leu Tyr Leu Val Thr Arg His Ala Asp Val Ile Pro
223           115          120          125
227 Val Arg Arg Arg Gly Asp Ser Arg Gly Ser Leu Leu Ser Pro Arg Pro
229           130          135          140
233 Ile Ser Tyr Leu Lys Gly Ser Ser Gly Gly Pro Leu Leu Cys Pro Ala
235 145           150           155           160
239 Gly His Ala Val Gly Ile Phe Arg Ala Ala Val Cys Thr Arg Gly Val
241           165           170           175
245 Ala Lys Ala Val Asp Phe Ile Pro Val Glu Ser Leu Glu Thr Thr Met
247           180          185          190
251 Arg Ser Pro
253           195

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259 &lt;210&gt; SEQ ID NO: 4

261 &lt;211&gt; LENGTH: 588

263 &lt;212&gt; TYPE: DNA

265 &lt;213&gt; ORGANISM: Hepatitis C virus

269 &lt;400&gt; SEQUENCE: 4

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271 atgaaaaaaaa aaggttccgt tggtatcgtc ggccgtatag tactgaacgg tgcttacgct 60
273 cagcagactc gaggtctgct gggttgcatc atcaacctccc tgaccggtcg tgacaaaaaac 120

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## RAW SEQUENCE LISTING

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275 caggttgaag gtgaagttca gatcgtttcc accgctgctc agaccttccct ggctacctgc 180
277 atcaacggtg ttgctggac cgtttaccac ggtgctggta cccgtaccat cgcttccccg 240
279 aaagggtcgg ttatccagat gtacaccaac gttgacaaag acctggttg ttggccggct 300
281 ccgcagggtt cccgttccct gaccccgctc acctgcggtt cctccgacct gtacctggtt 360
283 acccgctcac ctgacgttat cccggttcgt cgctggttg actcccgctg ttccctgctg 420
285 tccccgcgtc cgatctccta cctgaaaggt tcctccggtg gtccgctgct gtgcccggct 480
287 ggtcacgctg ttggtatctt ccgtgctgct gtttgacccc gtggtgttgc taaagctgtt 540
289 gacttcatcc cggttgaatc cctgaaacc accatgcgtt ccccgta 588
293 <210> SEQ ID NO: 5
295 <211> LENGTH: 15
297 <212> TYPE: PRT
299 <213> ORGANISM: Hepatitis C virus
303 <400> SEQUENCE: 5
305 Gln Gln Thr Arg Gly Leu Leu Gly Cys Ile Ile Thr Ser Leu Thr
307 1 5 10 15
313 <210> SEQ ID NO: 6
315 <211> LENGTH: 15
317 <212> TYPE: PRT
319 <213> ORGANISM: Hepatitis C virus
323 <400> SEQUENCE: 6
325 Gln Gln Thr Arg Gly Glu Glu Gly Cys Gln Glu Thr Ser Gln Thr
327 1 5 10 15
333 <210> SEQ ID NO: 7
335 <211> LENGTH: 15
337 <212> TYPE: PRT
339 <213> ORGANISM: Hepatitis C virus
343 <400> SEQUENCE: 7
345 Gln Gln Thr Arg Gly Glu Glu Gly Cys Gln Gln Thr Ser Glu Thr
347 1 5 10 15
353 <210> SEQ ID NO: 8
355 <211> LENGTH: 15
357 <212> TYPE: PRT
359 <213> ORGANISM: Hepatitis C virus
363 <400> SEQUENCE: 8
365 Gln Gln Thr Arg Gly Asn Gln Gly Cys Glu Lys Thr Ser Glu Thr
367 1 5 10 15
373 <210> SEQ ID NO: 9
375 <211> LENGTH: 15
377 <212> TYPE: PRT
379 <213> ORGANISM: Hepatitis C virus
383 <400> SEQUENCE: 9
385 Gln Gln Thr Arg Gly Glu Gln Gly Cys Gln Lys Thr Ser His Thr
387 1 5 10 15
393 <210> SEQ ID NO: 10
395 <211> LENGTH: 15
397 <212> TYPE: PRT
399 <213> ORGANISM: Hepatitis C virus
403 <400> SEQUENCE: 10
405 Gln Gln Thr Arg Gly Glu Gln Gly Cys Asp Glu Thr Ser Glu Thr

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DATE: 10/25/2001

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TIME: 08:46:14

Input Set : A:\PTO.AMC.txt

Output Set: N:\CRF3\10252001\I965594.raw

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407 1 5 10 15
413 <210> SEQ ID NO: 11
415 <211> LENGTH: 15
417 <212> TYPE: PRT
419 <213> ORGANISM: Hepatitis C virus
423 <400> SEQUENCE: 11
425 Gln Gln Thr Arg Gly Glu Glu Gly Cys Glu Gln Thr Ser Glu Thr
427 1 5 10 15
433 <210> SEQ ID NO: 12
435 <211> LENGTH: 195
437 <212> TYPE: PRT
439 <213> ORGANISM: Hepatitis C virus
443 <400> SEQUENCE: 12
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447 1 5 10 15
451 Gly Ala Tyr Ala Gln Gln Thr Arg Gly Glu Glu Gly Cys Gln Glu Thr
453 20 25 30
457 Ser Gln Thr Gly Arg Asp Lys Asn Gln Val Glu Gly Glu Val Gln Ile
459 35 40 45
463 Val Ser Thr Ala Ala Gln Thr Phe Leu Ala Thr Cys Ile Asn Gly Val
465 50 55 60
469 Cys Trp Thr Val Tyr His Gly Ala Gly Thr Arg Thr Ile Ala Ser Pro
471 65 70 75 80
475 Lys Gly Pro Val Ile Gln Met Tyr Thr Asn Val Asp Lys Asp Leu Val
477 85 90 95
481 Gly Trp Pro Ala Pro Gln Gly Ser Arg Ser Leu Thr Pro Cys Thr Cys
483 100 105 110
487 Gly Ser Ser Asp Leu Tyr Leu Val Thr Arg His Ala Asp Val Ile Pro
489 115 120 125
493 Val Arg Arg Arg Gly Asp Ser Arg Gly Ser Leu Leu Ser Pro Arg Pro
495 130 135 140
499 Ile Ser Tyr Leu Lys Gly Ser Ser Gly Gly Pro Leu Leu Cys Pro Ala
501 145 150 155 160
505 Gly His Ala Val Gly Ile Phe Arg Ala Ala Val Cys Thr Arg Gly Val
507 165 170 175
511 Ala Lys Ala Val Asp Phe Ile Pro Val Glu Ser Leu Glu Thr Thr Met
513 180 185 190
517 Arg Ser Pro
519 195
525 <210> SEQ ID NO: 13
527 <211> LENGTH: 588
529 <212> TYPE: DNA
531 <213> ORGANISM: Hepatitis C virus
535 <400> SEQUENCE: 13
537 atgaaaaaaa aaggatccgt tggtatcgct gccgtatag tactgaacgg tgcttacgct 60
539 cagcagactc gaggtgagga gggttgccaa gaaacctccc agaccggctg tgacaaaaac 120
541 caggttgaag gtgaagttca gatcgtttcc accgctgctc agaccttccg ggctacctgc 180
543 atcaacgggtg tttgctggac cgtttaccac ggtgctggtg cccgtaccat cgcttccccg 240
545 aaaggtccgg ttatccagat gtacaccaac gttgacaaag acctggttgg ttggccggct 300

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## RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/965,594

DATE: 10/25/2001

TIME: 08:46:14

Input Set : A:\PTO.AMC.txt

Output Set: N:\CRF3\10252001\I965594.raw

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547 ccgcagggtt cccgttcctt gaccccggtg acctgcgggtt cctccgacct gtacctgggtt 360
549 acccgtcacg ctgacgttat cccggttcgt cgtcgtgggtg actcccgtagg ttccctgctg 420
551 tccccgcgtc cgatctccta cctgaaaggt tctccgggtg gtccgctgct gtgcccggct 480
553 ggtcacgctg ttggtatctt cctgctgctg gtttgcaacc gtggtgttgc taaagctgtt 540
555 gacttcatcc cggttgaatc cctggaaacc accatgcgtt ccccgtaga 588
559 <210> SEQ ID NO: 14
561 <211> LENGTH: 197
563 <212> TYPE: PRT
565 <213> ORGANISM: Hepatitis C virus
569 <400> SEQUENCE: 14
571 Met Lys Lys Lys Gly Ser Val Val Ile Val Gly Arg Ile Asn Leu Ser
573 1 5 10 15
577 Gly Asp Thr Ala Tyr Ala Gln Gln Thr Arg Gly Glu Glu Gly Cys Gln
579 20 25 30
583 Glu Thr Ser Gln Thr Gly Arg Asp Lys Asn Gln Val Glu Gly Glu Val
585 35 40 45
589 Gln Ile Val Ser Thr Ala Ala Gln Thr Phe Leu Ala Thr Cys Ile Asn
591 50 55 60
595 Gly Val Cys Trp Thr Val Tyr His Gly Ala Gly Thr Arg Thr Ile Ala
597 65 70 75 80
601 Ser Pro Lys Gly Pro Val Ile Gln Met Tyr Thr Asn Val Asp Lys Asp
603 85 90 95
607 Leu Val Gly Trp Pro Ala Pro Gln Gly Ser Arg Ser Leu Thr Pro Cys
609 100 105 110
613 Thr Cys Gly Ser Ser Asp Leu Tyr Leu Val Thr Arg His Ala Asp Val
615 115 120 125
619 Ile Pro Val Arg Arg Arg Gly Asp Ser Arg Gly Ser Leu Leu Ser Pro
621 130 135 140
625 Arg Pro Ile Ser Tyr Leu Lys Gly Ser Ser Gly Gly Pro Leu Leu Cys
627 145 150 155 160
631 Pro Ala Gly His Ala Val Gly Ile Phe Arg Ala Ala Val Cys Thr Arg
633 165 170 175
637 Gly Val Ala Lys Ala Val Asp Phe Ile Pro Val Glu Ser Leu Glu Thr
639 180 185 190
643 Thr Met Arg Ser Pro
645 195
651 <210> SEQ ID NO: 15
653 <211> LENGTH: 594
655 <212> TYPE: DNA
657 <213> ORGANISM: Hepatitis C virus
661 <400> SEQUENCE: 15
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665 tacgctcagc agactcgagg tgaggagggt tgccaagaaa cctcccagac cggtcgtgac 120
667 aaaaaccagg ttgaaggtag agttcagatc gtttccaccg ctgctcagac cttcctggct 180
669 acctgcatca acggtgtttg ctggaccggt taccacgggtg ctggtaccog taccatcgct 240
671 tccccgaaag gtccggttat ccagatgtac accaaccgtt acaaagacct ggttggttgg 300
673 ccggtccgc aggttcccg ttccctgacc cctgcacct gcggttccct cgacctgtac 360
675 ctggttaccg gtcacgctga cgttatcccg gttcgtcgtc gtggtgactc cctggttcc 420
677 ctgctgtccc cgcgtccgat ctctacctg aaaggttcc cgggtggtcc gctgctgtgc 480

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VERIFICATION SUMMARY

PATENT APPLICATION: US/09/965,594

DATE: 10/25/2001

TIME: 08:46:15

Input Set : A:\PTO.AMC.txt

Output Set: N:\CRF3\10252001\I965594.raw

L:27 M:270 C: Current Application Number differs, Replaced Current Application Number  
L:29 M:271 C: Current Filing Date differs, Replaced Current Filing Date